

Name: \_\_\_\_\_

**Worksheet – Simplifying Rational Expressions – Version 1**

Directions: Please simplify the following expressions.

1.  $\frac{3x+12}{4x+16}$

2.  $\frac{-3y-9}{36+12y}$

3.  $\frac{b^2-9}{b^2+7b+12}$

4.  $\frac{m^2-2m-35}{m^2+9m+20}$

5.  $\frac{x^2+18x+81}{x^2+10x+9}$

6.  $\frac{3m^2b-24m^2}{6mb+24m}$

7.  $\frac{r^2-25}{r^2-10r+25}$

8.  $\frac{x^2-x-72}{x^2+11x+24}$

9.  $\frac{2b^2+28b+66}{b^2+11b}$

$$10. \frac{8k^2 - 200}{2k - 10}$$

$$11. \frac{25m^2 - 1}{5m^2 + 14m - 3}$$

$$12. \frac{10a^2b^2 - 90a^3b}{-5ab}$$

$$13. \frac{2x^2 + 7x + 3}{3x^2 + 8x - 3}$$

$$14. \frac{5y^2 - 3y - 2}{y^2 - 2y + 1}$$

$$15. \frac{3y^2 - 15y - 108}{2y^2 - 19y + 9}$$